

REMARKS

Claims 1-4 and 6-10 are pending in this application. By this amendment, claim 1 is amended and claim 5 is canceled without prejudice to or disclaimer of the subject matter recited therein. Support for the amendment to claim 5 can be found at, for example, page 4, line 12 to page 5, line 1 and page 12, lines 8-24. No new matter is added. Reconsideration and prompt allowance of the application based on the above amendments and following remarks is respectfully requested.

The Office Action rejects claims 1-4 under 35 U.S.C. §103(a) as being obvious over JP 2003-059519 to Kimioki et al (hereinafter "Kimioki"). The rejection is respectfully traversed.

Kimioki fails to teach or suggest "the reform control unit controls the operation of the reformer unit to cause a partial oxidation reaction of the selected material with the supplied oxygen for production of hydrogen to proceed in parallel with steam reforming reaction of the selected material with the supplied steam for production of hydrogen," as recited in independent claim 1 (as amended from dependent claim 5). The Examiner agrees that Kimioki, however, fails to teach or suggest this feature but relies on Isom as curing this deficiency. Isom fails to cure the deficiencies of Kimioki.

Specifically, Isom fails to teach or suggest that "the reform control unit controls the operation of the reformer unit to cause a partial oxidation reaction of the selected material with the supplied oxygen for production of hydrogen to proceed in parallel with steam reforming reaction of the selected material with the supplied steam for production of hydrogen," as recited in independent claim 1. Specifically, the Examiner asserts that Isom discloses a fuel processing system (14) (including a steam reformer (32)) that converts fuel feed stock, steam and air into hydrogen and carbon dioxide and a controller (50). However, the controller (50) of Isom is not equivalent to the recited reform control unit because

controller (50) merely controls the flow controller (48) to provide the appropriate flow of raw fuel feedstock and the steam reformer (32) to regulate the supply of steam in response to increases or decreases in the power demand of the fuel processing system (paragraph [0024]). Nowhere does Isom disclose that the controller (50) functions to control the operation of the flow controller (48) to cause a partial oxidation reaction of the gas with the supplied oxygen to proceed in parallel with the steam reforming reaction of the steam reformer (32) of the gas with the supplied steam. Thus, Isom fails to teach or suggest "the reform control unit controls the operation of the reformer unit to cause a partial oxidation reaction of the selected material with the supplied oxygen for production of hydrogen to proceed in parallel with steam reforming reaction of the selected material with the supplied steam for production of hydrogen," as recited in independent claim 1.

Kimioki fails to teach or suggest "the catalyst is a methane reforming catalyst including at least one of Ni, Rh, Ru, and their alloys," as recited in claim 4. Specifically, the Examiner asserts that Kimioki discloses an internal reforming section within the fuel electrode where steam reforming of methane in the fuel gas is carried out which is an endothermic reaction (paragraphs [0030] and [0031]). However, the Examiner fails to assert, and a review of the prior art has failed to reveal, where Kimioki discloses that the catalyst is a methane reforming catalyst including at least one of Ni, Rh, Ru, and their alloys. Thus, Kimioki fails to teach or suggest "the catalyst is a methane reforming catalyst including at least one of Ni, Rh, Ru, and their alloys," as recited in claim 4.

Applicants do not concede that Kimioki teaches or suggests the features recited in dependent claims 2 and 3. However, it is unnecessary to separately discuss the features recited in the dependent claims given the existence of clear and distinguishing features in independent claim 1.

Accordingly, Applicants respectfully request withdrawal of the rejection.

The Office Action rejects claims 5-8 under 35 U.S.C. §103(a) as being obvious over Kimioki in view of U.S. Patent Application Publication No. 2004/0038091 to Isom et al. (hereinafter "Isom"). The rejection is respectfully traversed.

Claim 5 has been canceled and thus, the rejection of this claim is now moot.

Isom fails to make up for the deficiencies of Kimioki. Specifically, Isom does not teach or suggest "the reform control unit controls the operation of the reformer unit to cause a partial oxidation reaction of the selected material with the supplied oxygen for production of hydrogen to proceed in parallel with steam reforming reaction of the selected material with the supplied steam for production of hydrogen," as recited in independent claim 1, as discussed above.

Thus, the deficiencies of Kimioki are not cured by the addition of Isom, and the rejection of independent claim 1 should be withdrawn. Claims 6-8 are patentable at least in view of the patentability of claim 1, as well as for the additional features recited therein.

Accordingly, Applicants respectfully request withdrawal of the rejection.

The Office Action rejects claims 9 and 10 under 35 U.S.C. §103(a) as being obvious over Kimioki in view of U.S. Patent Application Publication No. 2003/0061937 to Ito et al. (hereinafter "Ito"). The rejection is respectfully traversed.

This rejection is based on the assertion that Kimioki teaches or suggests all the features of claim 1, from which claims 9 and 10 depend. As discussed above, Kimioki does not teach or suggest all the features of claim 1.

Ito fails to make up for the deficiencies of Kimioki. Specifically, Ito does not teach or suggest "the reform control unit controls the operation of the reformer unit to cause a partial oxidation reaction of the selected material with the supplied oxygen for production of hydrogen to proceed in parallel with steam reforming reaction of the selected material with the supplied steam for production of hydrogen," as recited in independent claim 1. Ito teaches

a fuel cell system having a hydrogen-permeable membrane that includes one metal base layer, two metal middle layers formed on both sides of the metal base layer, and two metal coating layers formed on the external sides of respective metal middle layers (paragraph [0043]). Additionally, Ito teaches a reforming portion (232) that is supplied with raw material gas from an evaporator and that supports a reforming reaction by a catalyst (paragraphs [0030] to [0036]). However, Ito fails to teach or suggest "the reform control unit controls the operation of the reformer unit to cause a partial oxidation reaction of the selected material with the supplied oxygen for production of hydrogen to proceed in parallel with steam reforming reaction of the selected material with the supplied steam for production of hydrogen," as recited in independent claim 1.

Thus, the deficiencies of Kimioki are not cured by the addition of Ito, and the rejection of independent claim 1 should be withdrawn. Claims 9 and 10 are patentable at least in view of the patentability of claim 1, as well as for the additional features recited therein.

Accordingly, Applicants respectfully request withdrawal of the rejection.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claim are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Date: February 12, 2010

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